

DOI: <https://doi.org/10.32353/acfs.7.2023.01>
UDC 343.85

Oleksii Lytvynov,

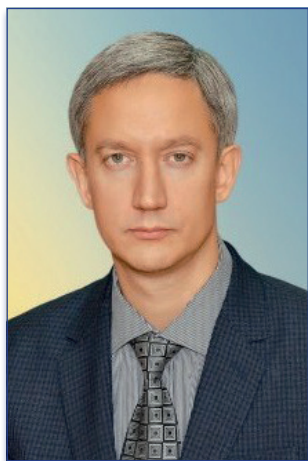
Acting Rector of the National Aerospace University named after M. E. Zhukovskiy «Kharkiv Aviation Institute», Kharkiv, Ukraine, Doctor of Law, Professor,
Honored Worker of Education of Ukraine.
Kharkiv, Ukraine.

Google Scholar: <https://scholar.google.com.ua/citations?user=UOOkfcUAAAAJ&hl=uk>

ORCID: <https://orcid.org/0000-0003-2952-8258>

Web of Science Researcher ID AAC-3677-2022

e-mail: lytvynovalex@gmail.com



Oleksii Lytvynov

Synergy Of The Criminological Space

Abstract. Synergy implies the «merging of energies» as the evolution of a system occurs through all its elements interaction, regardless of how small their role may seem in the overall functioning of the system. The fundamental synergy postulate is the concept of the spontaneous emergence of order and organization from chaos through internal systemic self-organization and exchange with the external environment. Moreover, the system development is depicted as a succession of ordered and chaotic states, facilitating the system adaptation and self-preservation, progressing through stages of intensification to reach a new level of existence. Notably, the synergistic direction is also referred to as systemic-dynamic, and it represents the most challenging component of the criminological area, offering the most expressive portrayal of its content, which, however, contemporary researchers either refute or disregard.

This article is to define this phenomenon, providing the criminological discourse as a synergistic system — a system of meanings within the criminological area that self-organizes, taking shape through their linguistic expression and mobilizing the functional potential of all elements on the path toward the attractor (cognitive goal). Conclusion: It can be argued that the intentional, purposeful expression of specific ideas by a criminologist simultaneously initiates processes of functional self-organization within the criminological discourse system. This is because the recipient's perception of the idea occurs not so much as a sequential (chain-like) addition of unfolding semantic components but as an accumulation and integration into a unified, multidimensional criminological area.

Keywords: self-organization (self-development), synergistic systems, criminological discourse, criminological area.



The processes of self-organization (self-development) of forensic science have long attracted the attention of scientists, but, like many other complex phenomena, they have not yet received an unequivocal assessment and even more or less the same understanding in the criminological community. The authors of these lines have repeatedly had to hear the categorical statement that self-organization is an “impossible thing” in science, because, firstly, the scientific community puts forward certain rules for the use of scientific concepts and categories, the introduction of new terms, constructions or word forms into the arsenal of a certain science, and secondly, in the course of scientific research, the scientist constructs the text according to a



Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Disclaimer

The funder had no role in the study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Contributors

The author contributed solely to the intellectual discussion underlying this paper, case-law exploration, writing and editing, and accept responsibility for the content and interpretation.

Declaration of Competing Interest

The author declare that they have no conflict of interest.

generally accepted model, not to mention academic publications. Therefore, there is no self-organization of science – the whole process is controlled!

Such an opinion would not be unreasonable if self-organization were understood as an unregulated accumulation of scientific theories, concepts, and terms, which is certainly impossible for adequate people (let's leave aside quasi-scientific experiments carried out for some special purposes). However, things are not so simple, and today this is proved by synergetics, or the theory of self-organization of complex systems, an actively developing interdisciplinary field aimed at revealing the dynamic, evolutionary properties of systems of different nature.

In fairness, we must admit that in some works by individual researchers who declare their commitment to synergetics, we do not find a deep understanding of what the specifics of scientific analysis within this area actually are; instead, we find an incomprehensible retelling of pseudo-synergetic ideas. Unfortunately, this practice significantly harms the position of those criminologists who profess synergistic ideas, since familiarity with such works creates prejudice against the synergistic methodology itself among other scientists. However, we hope that a closer examination of the content of scientific and analytical approaches in this area will remove the rejection formed by the frivolous attitude of such unfortunate scholars. For this reason, in this article, we aim to at least briefly highlight the possibility of a synergistic approach to the construction of criminological space.

First of all, the definition of the key concept of “self-organization” does not carry any attitudes incompatible with ideas about criminology, or rather, the criminological space as a system. In the general theory of systems, the basic characteristics of this phenomenon are as follows:

- 1) self-organization is perceived as the ability of systems for self-development, self-regulation during the use of energy, information, and matter that comes from the outside, but also the capabilities embedded within the system itself;
- 2) self-organization occurs in complex dynamic open systems that are in a non-equilibrium state;
- 3) self-organization is possible in the presence of a sufficiently large number of interacting elements;
- 4) the functioning of all system components is directed towards the attractor (attraction zone) — this is the goal of the system's evolution, the area of the most ordered state;
- 5) the behavior of the elements should be cooperative and coherent, which provide parameters of order: controlling factors of the system;
- 6) the interaction of elements of a self-organizing system is nonlinear, i.e. the result of this interaction is not based on the linear principle of sequential mechanical assembly of elements and their functions, but rather in a nonlinear, complex manner, under the influence of mutual reinforcement of any (including subtle or unpredictable) factors, when, figuratively speaking, “two plus two” can “equal five”;
- 7) nonlinear nature applies to both the self-development of the system and the influence of the environment, which significantly shapes the direction of the system's evolution¹.

Regarding the criminological space (i.e., criminology itself as a complex of ideas, discourse, and narratives, as well as the entirety of criminological practices), this approach envisions that this system evolves both in response

¹ Шевцова Г.З. Синергетичний менеджмент підприємств : монографія. Київ : НАН України, 2016. 454 с.; Скіцько В.І. Синергія цифрових технологій в логістичних системах. Інвестиції: практика та досвід. 2018. № 16. С. 18-24; Смачило В.В. Концепція синергії в соціально-економічних системах. Вісник Одеського національного університету. 2018. Т. 23. Вип. 4(69). С. 81-85.

Oleksii Lytvynov

SYNERGY OF THE
CRIMINOLOGICAL SPACE

Synergy implies the «merging of energies» as the evolution of a system occurs through all its elements interaction, regardless of how small their role may seem in the overall functioning of the system. The fundamental synergy postulate is the concept of the spontaneous emergence of order and organization from chaos through internal systemic self-organization and exchange with the external environment. Moreover, the system development is depicted as a succession of ordered and chaotic states, facilitating the system adaptation and self-preservation, progressing through stages of intensification to reach a new level of existence. Notably, the synergistic direction is also referred to as systemic-dynamic, and it represents the most challenging component of the criminological area, offering the most expressive portrayal of its content, which, however, contemporary researchers either refute or disregard.

This article is to define this phenomenon, providing the criminological discourse as a synergistic system – a system of meanings within the criminological area that self-organizes, taking shape through their linguistic expression and mobilizing the functional potential of all elements on the path toward the attractor (cognitive goal). Conclusion: It can be argued that the intentional, purposeful expression of specific ideas by a criminologist simultaneously initiates processes of functional self-organization within the criminological discourse system. This is because the recipient's perception of the idea occurs not so much as a sequential (chain-like) addition of unfolding semantic components but as an accumulation and integration into a unified, multidimensional criminological area.

Keywords: self-organization (self-development), synergistic systems, criminological discourse, criminological area.

to signals from the external environment, confirming the system's openness, and in accordance with its internal tendencies at various levels (global, regional, subregional, object-oriented). It is evident that the criminological space is characterized by complex organization and dynamism, its ability to disrupt equilibrium and adaptability.

Furthermore, from a functional perspective, the criminological space is a complex instrument. It is a multi-layered system that reflects and, in some ways, shapes an individual's consciousness (criminological awareness). It is an axiom that a human is a self-regulating system, capable of self-sustenance and self-restoration, and that in the human brain, self-organization of neural connections is constantly occurring, influencing perception². Therefore, there is nothing incredible in hypothetically considering the presence of similar processes within the criminological space.

In terms of synergy, the criminological space is a system that serves to attractor (an area of attraction for all its elements) – the realization of certain criminological ideas. It allows us to use its means to convey the images of consciousness, which, of course, are not absolutely frozen and completely regulated. Consequently, it is natural to recognize the constant mobility and evolution of the criminological space. However, the point is not only to recognize the dynamism and disequilibrium of the criminological space, but also that it would be illogical to believe that changes in criminological theories or practices are nothing more than disruptive blows, random and heterogeneous from the point of view of the system. Changes often have as their object the system, its strengthening, development, etc.

Therefore, the most crucial characteristic of the criminological space is its mobility, evolution, modification of its components and the stabilizing properties of the system as a whole. Regardless of how signals that trigger functional oscillations within the system are generated, whether internally or externally (resulting in the emergence of new elements, changes in existing ones, connections, or functions), the criminological space, following its inherent parameters, «digests» these oscillations. It either adapts to them within a certain range, rejects them, or modifies them to seamlessly integrate into the overall system. These processes naturally involve a large number of elements interacting with each other, which is inherently cooperative and coherent. Otherwise, the system would begin to deteriorate, affecting both the field of science and the practice of crime prevention.

We believe that everything said so far dispels doubts about the legitimacy of applying the principles of synergy in criminology. However, it is necessary to further examine how the criminological space achieves synergy.

Remember that synergy involves the «merging of energies», as the evolution of the system occurs through the interaction of all elements, no matter how minor their role may seem in the overall functioning of the system³. The initial postulate of synergy is the idea that order and organization can spontaneously emerge from the disorder as a result of internal system self-organization and exchange with the external environment. At the same time, the development of the system is presented as an alternation of ordered and chaotic states, which contributes to the adaptation and self-preservation of the system, passing through stages of aggravation, and reaching a new level of existence. It is no coincidence that the synergistic direction is also called system-dynamic.

² Хакен Г., Хакен-Крель М. Тайну восприятия. Синергетика как ключ к мозгу. М.: Ин-т компьютерных исследований, 2002. 272 с.

³ Велика українська кримінологічна енциклопедія. У 2 т. Т. 2: М-Я / редкол.: В. В. Сокурено (голова), О. М. Бандурка (співголова) та ін.; наук. ред. О. М. Литвинов. Харків : Факт, 2021. С. 491-496.



Oleksii Lytvynov

SYNERGIE DE L'ESPACE
CRIMINOLOGIQUE

La synergie implique une « fusion des énergies », puisque l'évolution du système s'effectue par l'interaction de tous les éléments, aussi minime que puisse paraître leur participation au fonctionnement global du système. Le postulat initial de la synergie est l'idée de la possibilité d'une émergence spontanée de l'ordre et de l'organisation à partir du désordre à la suite de l'auto-organisation du système interne et des échanges avec l'environnement externe. Dans le même temps, le développement du système est présenté comme une alternance d'états ordonnés et chaotiques, qui contribuent à l'adaptation et à l'auto-préservation du système, en passant par les étapes d'exacerbation et en atteignant un nouveau niveau d'existence. Ce n'est pas un hasard si la direction synergique est également appelée dynamique du système, c'est-à-dire qu'elle est la composante la plus problématique de l'espace criminologique, le meilleur représentant de son contenu qui est cependant nié ou ignoré par les chercheurs modernes.

Le but de l'article est de donner une définition de ce phénomène, la définition du discours criminologique comme un système synergique, c'est un système de significations de l'espace criminologique qui s'organise lui-même, se forme à travers leur expression linguistique et mobilise le potentiel fonctionnel de chacun, éléments sur le chemin de l'attracteur (but cognitif). Conclusions : on peut affirmer que l'expression intentionnelle et ciblée d'idées spécifiques par un criminologue déclenche simultanément les processus d'auto-organisation fonctionnelle du système de discours criminologique, puisque la perception d'une idée par le destinataire ne se produit pas tant de manière séquentielle (chaîne) ajout de composants sémantiques dépliant, mais comme un espace accumulé et intégré dans un seul espace criminologique multidimensionnel.

Mots-clés : auto-organisation (auto-développement), systèmes synergiques, discours criminologique, espace criminologique

The fundamentals of understanding the synergy of system evolution can be summarized as follows. A complex open system, in its journey towards an attractor, at some stage, exists in a state of relative equilibrium defined by order parameters – factors that govern its functioning. Gradually, the dynamic processes within the system and signals from the external environment disrupt the equilibrium and lead to the emergence of random chaotic fluctuations, which, when amplified, can significantly influence the system, bringing it closer to the point of bifurcation – the moment of choosing the further path. At this point, any signal can serve as a catalyst for the system's development in one direction or another (not always a better one). Resisting disorganizing tendencies, the system sheds excess matter, energy, or information: they are dispersed (dissipation) into the external environment, and there is also an influx of resources from the outside, which helps to organize the system. Ultimately, as a result of complex nonlinear interactions and the mutual reinforcement of different components within it, spontaneous properties emerge that are characteristic not of individual elements, but of the system as a whole. The system chooses the further path of evolution and transitions to a qualitatively new level of organization, where the parameters of order are also transformed, and the described mechanism of self-development is set in motion again. Otherwise, the system will collapse.

Synergetic analysis reveals the mechanisms of self-organization and identifies the parameters of order that ensure the self-preservation of the system and regulate the processes through which the evolution of the system and its elements occurs on the path to the attractor. Furthermore, acknowledging the nonlinear properties of the criminological space and criminological discourse does not imply the denial of linearity in the connections between their individual elements. The traditional notion that the linearity of the arrangement of elements in the system represents a form of their existence and functioning in its own right is indeed valid. However, the content of criminological theory is generated not only through the linear composition of interconnected ideas (fragments of discourse) or cohesive narratives but also through the emergence of new meaningful components that are specific to the holistic composition.

We have a particular interest in the system-dynamic analysis of criminological discourse because it represents the most challenging component of the criminological space, the best expression of its content, which, however, is either denied or overlooked by contemporary researchers. There are specific reasons for this.

Firstly, despite the recognition of a certain systematic nature of criminological discourse, it is difficult to provide a clear definition of it as a system, considering the infinite variety of its forms and its generally unstable "behavior" because it is reborn anew in each cognitive act.

Secondly, discourse is not just text; it is a complex combination of meanings, language, speech, and their perception, along with all the contextual nuances influenced by various situational factors and communication participants. Can we identify and systematize the governing parameters of such a system?

Thirdly, how do we understand the "chaotization" of the criminological discourse, which synergy perceives as an inevitable stage in the development of any system?

Other contentious questions arise. But even if such questions are analytically resolved, will it help in developing optimal cognitive models that will contribute to the further development of the criminological space? After

Synergie impliziert eine „Verschmelzung von Energien“, da die Entwicklung des Systems durch das Zusammenspiel aller Elemente erfolgt, egal wie gering ihre Beteiligung an der Gesamtfunktion des Systems erscheinen mag. Das Ausgangspostulat der Synergetik ist die Idee der Möglichkeit der spontanen Entstehung von Ordnung und Organisation aus Unordnung als Ergebnis der Selbstorganisation des internen Systems und des Austauschs mit der äußeren Umgebung. Gleichzeitig wird die Entwicklung des Systems als Wechsel geordneter und chaotischer Zustände dargestellt, die zur Anpassung und Selbsterhaltung des Systems beiträgt, die Phasen der Verschärfung durchläuft und eine neue Existenzebene erreicht. Es ist kein Zufall, dass die synergistische Richtung auch systemdynamisch genannt wird, das heißt, sie ist der problematischste Bestandteil des kriminologischen Raums, der beste Vertreter seines Inhalts, der jedoch von modernen Forschern entweder geleugnet oder ignoriert wird.

Der Zweck des Artikels besteht darin, eine Definition dieses Phänomens zu geben, die Definition des kriminologischen Diskurses als synergistisches System – ein System von Bedeutungen des kriminologischen Raums, das selbstorganisiert ist, durch seinen sprachlichen Ausdruck geformt wird und das funktionale Potenzial aller mobilisierten Elemente auf dem Weg zum Attraktor (kognitives Ziel). Schlussfolgerungen: Es kann behauptet werden, dass die absichtliche, zielgerichtete Äußerung konkreter Ideen durch einen Kriminologen gleichzeitig die Prozesse der funktionalen Selbstorganisation des kriminologischen Diskurssystems auslöst, da die Wahrnehmung einer Idee durch den Adressaten weniger als vielmehr sequentiell erfolgt (Kette) Addition sich entfaltender semantischer Komponenten, sondern als akkumulierte und in einen einzigen ganzen multidimensionalen kriminologischen Raum integrierte.

Schlüsselwörter: Selbstorganisation (Selbstenwicklung), synergistische Systeme, kriminologischer Diskurs, kriminologischer Raum/

all, essentially, this should be our primary interest. We believe that answers can be found based on synergy.

We propose the following definition of the criminological discourse as a synergistic system: it is a system of meanings within the criminological space that self-organizes, is formed through their linguistic expression, and mobilizes the functional potential of all elements on the path to the attractor (cognitive goal). This interpretation, on the one hand, captures the essential characteristics of synergy (systemic nature, self-regulation, dynamism, orientation towards the attractor, complexity, and coherence of element behavior). On the other hand, it helps to avoid ambiguity regarding self-organization, as it clearly defines the functional and meaningful aspect of self-regulation.

It is also evident that the self-organization of meanings is a synergistic non-linear process ($2+2=5$). It does not follow a strictly regulated algorithm but occurs through multidimensional interaction and mutual reinforcement of the functional load of all participating elements. In criminology and science in general, there are rules for creating meanings that result in not just the sum of meanings but the emergence of new meanings. Otherwise, the criminological space would be devoid of very important components — implications, a subsystem of figurative means of expression, the phenomenon of precedent, etc., and ideas and theories would be much poorer.

Let's consider such a text: "... it is in precisely this controversy that humanity is revealed. And this controversy is not always a dialogue; quite often, it is exclusively two monologues (or more), a cacophony of different languages, different readings, different thoughts (both in the literal and figurative sense). A series of moral dilemmas, as defined by V. S. Bibler, concentrated within a single space, can be further extended and diversified: 1) V. I. Lenin, Y. V. Stalin, F. E. Dzerzhynskiy, S. V. Mikhalkov, V. V. Maiakovskiy, O. M. Tolstoy, M. Hriekov, etc.; 2) A. A. Akhmatova, O. E. Mandelshtam, Y. O. Brodskiy, A. D. Sakharov, D. D. Shostakovych, D. S. Likhachov, B. L. Pasternak, L. Ya. Hinzburh, O. I. Solzhenitsyn; 3) P. Skoropadskiy, K. H. Mannerheim, P. Vrahnel, etc.; 4) S. V. Petliura, S. A. Bandera, V. S. Ctus, V. M. Chornovol, Yu. I. Andrukhovych". And a note: "The mentioned personalities have been deliberately listed by us without adhering to any formal order, whether alphabetical or related to their field of activity, genre, and so on, in order to emphasize the non-linearity of social narratives, in which political, artistic, and everyday components are interwoven in the most mysterious ways; where the kitchen rhymes with parliament, the museum with the garbage dump, the Christmas tree with concentration camps..."⁴.

Analyzing this discourse fragment linearly, through the prism of mechanical addition of meanings, we get a straightforward result:

an author positively characterizes the situation of controversy, asserting that "different opinions (both in the literal and metaphorical sense)" are a good thing (with a specific reference by names, which, according to a linear interpretation, conveys this meaning and not the metaphorical one);

the above is confirmed by the note: "the non-linearity of social narratives, in which political, artistic, and everyday components are interwoven in the most mysterious ways; where the kitchen rhymes with parliament, the museum with the garbage dump, the Christmas tree with concentration camps..."

⁴ Кожушко С.О. Протидія злочинності в оборонно-промисловому комплексі України : монографія / за заг. ред. д-ра юрид. наук, проф. О. М. Литвинова ; Кримінологічна асоціація України. – Х. : Факт, 2022. С. 124.

Oleksii Lytvynov

SYNERGIA PRZESTRZENI
KRYMINOLOGII

As we can see, with such a reading, neither negative implications, sarcasm, nor logical connections of points are perceived. And the functional attractor (content-intention of the author) is reduced to the expression of a positive assessment of the situation. It becomes clear that the purely linear sequential addition of semantic components of the text does not allow to reveal the true attractor of the discourse and generally does not create the discourse that is formed when the mechanism of functional synergy is included. It is the ability of our consciousness to non-linear synergistic perception of the text, context and subtext in combination with the author's ability to embody the intended plot that generates a fully understood discourse. Then the functional perspective of the given fragment acquires a different vector.

The text does not contain any accusations of humanity's controversy, but how do we find out what the author's intention is? First and foremost, thanks to the interaction of discourse (an open system) with the external environment — the reader's consciousness and the communication situation: the worldview of a normal person is more inclined towards binary opposition, which rejects the accusation of humanity as a whole as an impossible phenomenon for a civilized society. However, did the author have this in mind? Even if not explicitly expressed, is this not obvious? Therefore, the mocking indulgence towards controversy leaves no doubt about the strong condemnation of this position.

The area of gravity of elements within this subsystem of criminological discourse (functional attractor) is created "virtually" — in the subtext. The bitterness of a person who is mentally suffering from what is happening is manifested in the phrase "from the opposite" because he or she understands the futility of accusations against humanity, which sincerely believes that political struggle cannot be without victims. In addition, in such circumstances, the author uses sarcasm to have a stronger emotional impact on the addressee than outright accusations, and the techniques of hyperbole and metaphor used highlight the full accusatory power of the above. The mobilization of the functional potential of such components as "the kitchen rhymes with parliament, the museum with the garbage dump, the Christmas tree with concentration camps..." determines the vector of semantic development of the criminological discourse system. The contrast between the tragedy of the situation and the irony of the speech gives a specific flavor to the entire discourse and actually creates an opinion that is the opposite of what is being communicated.

The given comparison of two different perceptions of the semantic system of the same text gives grounds for asserting that without the synergistic properties of human consciousness, the discourse, and the criminological one in particular, would lose all its multidimensionality, and any reasonable but not expressed semantic components would be excluded. Those that are formulated and voiced still do not exhaust the real summative meaning of what was said or written.

Nevertheless, it is obvious that some factors (order parameters) operate in the criminological discourse, which regulate and govern its systemic properties and holistic character. This allows scientists, as well as everyone who is interested in the problem of combating crime, to communicate and understand each other. Therefore, in relation to the criminological space, one of the central provisions of synergy about the crucial importance of the parameters of the order of self-preservation of the system should be revealed through the analysis of stabilizing, stable characteristics that direct, for example, the elements of the criminological discourse in the process of self-organization.

Synergia oznacza „fuzję energii”, ponieważ ewolucja systemu odbywa się poprzez interakcję wszystkich elementów, niezależnie od tego, jak niewielki może się wydawać ich udział w ogólnym funkcjonowaniu systemu. Początkowym postulatem synergetyki jest idea możliwości samoistnego wyłonienia się porządku i organizacji z nieporządku w wyniku samoorganizacji systemu wewnętrznego i wymiany ze środowiskiem zewnętrznym. Jednocześnie rozwój systemu przedstawiany jest jako naprzemiennosc stanów uporządkowanych i chaotycznych, co przyczynia się do adaptacji i samozachowawstwa systemu, przechodząc przez etapy zaostrzenia i osiągając nowy poziom istnienia. Nieprzypadkowo kierunek synergiczny nazywany jest także systemowym dynamicznym, czyli jest najbardziej problematycznym składnikiem przestrzeni kryminologicznej, najlepszym wykładnikiem jej treści, czemu jednak współcześni badacze albo zaprzeczają, albo je ignorują.

Celem artykułu jest podanie definicji tego zjawiska, zdefiniowanie dyskursu kryminologicznego jako układu synergistycznego – systemu znaczeń przestrzeni kryminologicznej, który jest samoorganizujący się, kształtowany poprzez ich językową ekspresję i mobilizuje potencjał funkcjonalny wszystkich elementów na drodze do atraktora (cel poznawczy). Wnioski: można stwierdzić, że intencjonalne, celowe wyrażanie określonych idei przez kryminologa uruchamia jednocześnie procesy funkcjonalnej samoorganizacji systemu dyskursu kryminologicznego, gdyż dostrzeżenie idei przez adresata następuje nie tyle, co sekwencyjne (łańcuch) dodanie rozwijających się komponentów semantycznych, ale jako skumulowaną i zintegrowaną w jedną całość wielowymiarową przestrzeń kryminologiczną.

Słowa kluczowe: samoorganizacja (samorozwój), systemy synergiczne, dyskurs kryminologiczny, przestrzeń kryminologiczna/

The peculiarity of order parameters is that, on the one hand, they subordinate system elements to themselves, on the other hand, they themselves are generated by the collective behavior of system elements (in terms of synergy, this is a circular causal relationship ⁵). To solve the problem of system conservation, the order parameters must be “strong” factors of the system. It is accepted that everything in the system is based on relations (connections) ⁶. Thus, it can be concluded that terminological consistency is the regulating parameter that preserves the integrity of the system. If the need for modification arises, then the parameters of the order are modified within the range of options that do not endanger the viability of the system.

Functional connections between elements of the system of criminological discourse are based on semantic connections between propositions and on relations between facts and their properties ⁷. It is natural that such a comparison of discourse components is possible under the condition of contextual and semantic compatibility of the facts of each of the statements (propositions, their complexes, or their components) in a single communication situation.

Analyzing the non-linearity of the criminological discourse, one should also touch on a certain role of “chaotic” elements. The concept of “chaotic elements” in the discourse has a conditional character: it is not about the disorderly accumulation of language units, but about the inclusion of elements in the language chain that do not correspond to the general trends or the initial conditions of the evolution of the system⁸. Synergetics defines chaos not as complete orderliness (and even more so not nonsense), but as a weakly structured state of the system when random fluctuations in the behavior of elements can be both disorganizing and constructive⁹. That is, the element appears as chaotic not from the point of view of the user, but from the point of view of the internal state of the system — in relation to other elements, in which new trends arise thanks to the chaotic element. Therefore, to a certain extent, chaos is recognized as a necessary mechanism for the evolution of the system, in particular, the system of meanings of the criminological discourse. By disrupting the smooth movement of the system towards the attractor, chaotic elements cause functional “shifts” in the overall structural and semantic development of the system. This, in turn, increases the dynamism of its functioning, expands the spectrum of possible paths for further evolution, and activates the perception of the criminological discourse by the recipient.

The functional and synergistic analysis of fragments of criminological discourse allows us to reveal the mechanisms of its functional evolution and to see by what means and trajectories



⁵ Аршинов В. И. Синергетика и методология постнеклассической науки. *Философия науки*. Вып. 8: Синергетика человекомерной реальности. М.: ИФРАН, 2002. С. 14-36.

6 Хакен Г. Можем ли мы применять синергетику в науках о человеке? *Синергетика и психология*. Вып. 2. Социальные процессы / Под ред. И. Н. Трофимовой. М.: ЯНУС-К, 2000. С. 11-25.

⁷ Dijk T. van. *Studies in the Pragmatics of Discourse*. The Hague/Berlin: Mouton, 1981. P. 270.

⁸ Пономаренко Е. В. О принципах синергетического исследования речевой деятельности. *Вопросы филологии*. 2007. № 1. С. 14-23.

⁹ Литвинов О.М. Теорія хаосу в контексті кримінологічних досліджень. *Вісник Кримінологічної асоціації України* : зб. наук. праць. № 1 (24). 2021. С. 133-142.

of “movement” of elements the discourse is able to generate and actualize nonlinear synergistic semantic components.

In a generalized form, the course of synergistic development of the criminological discourse system looks as follows. Discourse is a basic element and conveys the initial, balanced conditions for the development of the system of meanings (ideas) and their linguistic representation (expression). The idea is initially perceived as a reflection of the objective course of events, which enters into the process of formation of the criminological discourse system as an independent “full-fledged” component. However, in the future, the role of the idea is modified in both logical, semantic, and pragmatic aspects: with its systemic perception, the statement changes to a different quality and becomes a background component of this system: being wedged in, it causes its chaos, increases imbalance, but at the same time is constructive. The constructive role is manifested in the formation of spontaneous functional properties – the emergence of additional meanings, and most importantly – a signal about the possibility of system transformation. Having completed this task, the functional field is dispersed — the idea is “digested” by the system.

The introduction of chaos through the idea causes competition among the parameters of order (functional connections), leading the system to a bifurcation point (branching), forcing it to make a choice for its further evolutionary path. As the criminological discourse continues to evolve, relationships of switching are established between ideas, and between ideas and expressions, there is elucidation of the essence. This functional interaction between components of the criminological discourse contributes to the creation of a structural and semantic articulation, thus implementing a circular causal relationship of synergistic system development.

In the case of non-acceptance of the idea, the system of criminological discourse goes into the aggravation mode, when the dynamics of semantic and pragmatic development increases noticeably. The interaction of ideas, and even statements, is regulated by relations of alternative or negation. Activation of the evolutionary movement towards the attractor is facilitated by a number of functional means: comparison, opposition, etc.

All these stages and elements of functional evolution are “attracted” to the main communicative goal of criminological discourse and thus form the attractor of its system: connection not only with similar but also with all other statements. The combination of these elements and the specifics of their interaction changes the pragmatics of criminological discourse (it becomes more categorical). The systematic and coherent interaction of all elements and parts of this block produces another emergent component of the functional perspective — the idea of the need to preserve the integrity of the system. The result of the systemic evolution of the considered communicative block is to bring the system of meanings through disequilibrium, chaos and nonlinearity to an ordered state at a new level — to substantiate the main idea of this fragment of criminological discourse.

Thus, it can be argued that the intentional, purposeful expression of specific ideas by a criminologist simultaneously triggers the processes of functional self-organization of the criminological discourse system, since the perception of an idea by the addressee occurs not so much as a sequential (chain) addition of unfolding semantic components, but as an accumulated and integrated into a single whole multidimensional criminological space.

In conclusion, it should be acknowledged that the constraints of this article do not allow for the presentation of all considerations regarding the synergistic properties of the criminological space (even when considering the example of criminological discourse). However, even a concise overview of the basic principles of functional synergy is sufficient to understand that the analysis of self-organized processes is of both scientific and practical interest.

The development of a corpus of effective models for the functioning of the criminological space will enable the proposal of methods for harmonizing its elemental-component composition at all levels.

References

- Shevtsova H.Z. Synerhetychnyi menedzhment pidpriemstv : monohrafiia. Kyiv : NAN Ukrainy, 2016. 454 s. [in Ukrainian].
- Skitsko V.I. Synerhiia tsyfrovyykh tekhnolohii v lohistychnykh systemakh. Investytsii: praktyka ta dosvid. 2018. № 16. S. 18-24. [in Ukrainian].
- Smachylo V.V. Kontseptsiiia synerhii v sotsialno-ekonomichnykh systemakh. Visnyk Odeskoho natsionalnoho universytetu. 2018. T. 23. Vyp. 4(69). S. 81-85. [in Ukrainian].
- Khaken H., Khaken-Krell M. Tainyi vospriiatyia. Synerhetyka kak kliuch k mozghu. M.: Yn-t kompiuternykh yssledovanyi, 2002. 272 s.
- Velyka ukrainska kryminolohichna entsyklopediia. U 2 t. T. 2: M-Ya / redkol.: V. V. Sokurenko (holova), O. M. Bandurka (spivholova) ta in.; nauk. red. O. M. Lytvynov. Kharkiv : Fakt, 2021. 870 s. S. 491-496 [in Ukrainian].
- Kozhushko S.O. Protydiia zlochynnosti v oboronno-promyslovomu kompleksi Ukrainy : monohrafiia / za zah. red. d-ra yuryd nauk, prof. O. M. Lytvynova ; Kryminolohichna asotsiatsiia Ukrainy. Kh. : Fakt, 2022. 199 s. [in Ukrainian].
- Khaken H., Khaken-Krell M. Tainyi vospriiatyia. Synerhetyka kak kliuch k mozghu. M.: Yn-t kompiuternykh yssledovanyi, 2002. 272 s.
- Velyka ukrainska kryminolohichna entsyklopediia. U 2 t. T. 2: M-Ya / redkol.: V. V. Sokurenko (holova), O. M. Bandurka (spivholova) ta in.; nauk. red. O. M. Lytvynov. Kharkiv : Fakt, 2021. 870 s. S. 491-496. [in Ukrainian].
- Kozhushko S.O. Protydiia zlochynnosti v oboronno-promyslovomu kompleksi Ukrainy : monohrafiia / za zah. red. d-ra yuryd nauk, prof. O. M. Lytvynova ; Kryminolohichna asotsiatsiia Ukrainy. – Kh. : Fakt, 2022. 199 s. [in Ukrainian].
- Arshynov V. Y. Synerhetyka y metodolohiia postneklasycheskoi nauky. Fylosofiia nauky. Vyip. 8: Synerhetyka chelovekomernoï realnosti. M.: YFRAN, 2002. S. 14-36.
- Khaken H. Mozhem ly myi prymeriat synerhetyku v naukakh o cheloveke? Synerhetyka y psykholohiia. Vyip. 2. Sotsyalnye protsessy / Pod red. Y. N. Trofymovoi. M.: YaNUS-K, 2000. S. 11-25. [in Ukrainian].
- Dijk T. van. Studies in the Pragmatics of Discourse. The Hague/Berlin: Mouton, 1981. 326 p.
- Ponomarenko E. V. O pryntypakh synerhetycheskoho yssledovanyia rechevoi deiatelnosti. Voprosy fylolohyy. 2007. № 1. S. 14-23.
- Lytvynov O.M. Teoriia khaosu v konteksti kryminolohichnykh doslidzhen. Visnyk Kryminolohichnoi asotsiatsii Ukrainy : zb. nauk. prats. № 1 (24). 2021. S. 133-142. [in Ukrainian].

Received by Editorial Board: 26.06.2023

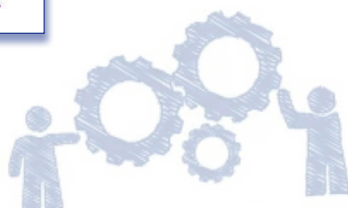
Suggested Citation:

Lytvynov, O. (2023). Synergy Of Criminology Space. *Archives of Criminology and Forensic Sciences*. 1 (7). 28-36. DOI: <https://doi.org/10.32353/acfs.7.2023.01>





COLLABORATE



PARTNER



IDEAS

SYNERGY



BENEFITS



SHARE



COOPERATE